

Data sheet for SIMOTICS S-1FK7

MLFB-Ordering data

1FK7061-4CH71-1QG1



Figure similar

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data

Rated speed (100 K) 4500 rpm

Number of poles 6

Rated torque (100 K) 4.3 Nm

Rated current 6.2 A

Static torque (60 K) 5.30 Nm

Static torque (100 K) 6.40 Nm

Stall current (60 K) 7.10 A

Stall current (100 K) 8.70 A

Moment of inertia 4.100 kgcm²

Efficiency 93.0 %

Physical constants

Torque constant 0.73 Nm/A

Voltage constant at 20° C 47.0 V/1000*min⁻¹

Winding resistance at 20° C 0.35 Ω

Rotating field inductance 10.7 mH

Electrical time constant 30.50 ms

Mechanical time constant 0.79 ms

Thermal time constant 45 min

Shaft torsional stiffness 36500 Nm/rad

Net weight of the motor 9.5 kg

Mechanical data

Motor type Permanent-magnet synchronous motor

Motor type High Dynamic

Shaft height 63

Cooling Natural cooling

Radial runout tolerance 0.040 mm

Concentricity tolerance 0.10 mm

Axial runout tolerance 0.10 mm

Vibration severity grade Grade A

Connector size 1

Degree of protection IP65

Design acc. to Code I IM B5 (IM V1, IM V3)

Temperature monitoring Pt1000 temperature sensor

Electrical connectors Connectors for signals and power rotatable

Color of the housing Standard (Anthracite RAL 7016)

Holding brake without holding brake

Shaft end Plain shaft

Encoder system Encoder AS20DQI: absolute encoder single-turn 20 bits



Figure similar

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Optimum operating point		Recommended Motor Module	
Optimum speed	4500 rpm	Rated inverter current	9 A
Optimum power	2.0 kW	Maximum inverter current	27 A
Limiting data		Maximum torque	17.30 Nm
Max. permissible speed (mech.)	7500 rpm		
Max. permissible speed (inverter)	7500 rpm		
Maximum torque	17.3 Nm		
Maximum current	26.5 A		